



# Video Furnace Inspection

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# VIDEO FURNACE INSPECTION

High-temperature video inspection at up to 600 °C

## CHALLENGE

In order to assess the condition of an industrial furnace interior, an elaborate furnace inspection is usually carried out during a production stop. This requires a complete cooling down and, if need be, purging of the furnace. The personnel must execute the inspection in a very confined space, comply with strict safety rules and document any abnormalities detected on the spot. If cameras are used for inspection, it has so far also been necessary to transport them through the interior of a cold furnace. This procedure required a cooling and subsequent heating of the furnace which proved to be very time and energy-consuming. A regular and proactive furnace inspection is hardly possible under these circumstances.

## LOI'S DIGITAL SOLUTION

Thanks to the combination of a 4K video camera and a high-temperature torch with up to 960 lumens in a special heat protection container, Tenova LOI Thermprocess is able to offer a high-temperature video inspection which can be carried out at a furnace temperature of up to 600 °C. While the system is safely transported through the plant on a furnace-specific frame, a video of the furnace interior is recorded. During the subsequent evaluation, the visual material can be fast-forwarded and rewound; the high resolution allows for a detailed evaluation and documentation of conspicuous features in the furnace interior. Furthermore, the archiving of the video material makes it possible to estimate the chronological development of damages, which is a pre-condition for a proactive schedule and preparation of service interventions.

## OUR SERVICE

- Allocation of special equipment
- On-site support
- Evaluation of video material
- Report and recommendations

## YOUR ADVANTAGES

- Reduced production downtime, as no complete heating and cooling of the furnace and, if need be, purging and restoration of the furnace atmosphere is necessary
- This inspection can be executed also during production\*
- No opening and inspection of the furnace necessary
- Reduced risk potential for personnel
- Early detection of defects
- Continuous documentation of the furnace condition
- Allows predictive planning of service operations

\* Depending on the temperature and time spent in the furnace



**Sustainable solutions for a green transition of metals**



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